



FEB 25 1997

Reply to Attn of **JE**

**TO:** Distribution

**FROM:** JE/Acting Director, Environmental Management Division

**SUBJECT:** Phase-out of Hydrochlorofluorocarbons (HCFCs)

As required under the terms of the Clean Air Act and the U.N. Montreal Protocol, the planned phase-out of HCFCs beginning in 2003 is continuing to approach. HCFCs, Class II Ozone Depleting Substances, will be completely phased out of production and consumption between 2003 and 2030.

HCFCs have been identified and are being implemented as replacements for Class I Ozone Depleting Substances in many applications, such as facilities (cooling and refrigeration) and in flight programs (foams and insulating materials). These applications of HCFCs as replacements for no longer available materials may represent the best possible alternative at this time. However, it is important to keep in mind the planned phase-out of HCFCs between 2003 and 2030 on the dates shown below:

Class II Substances

<u>Date</u>	<u>Affected Compounds</u>	<u>Restriction</u>
January 1, 2003	HCFC-141b	Ban on production and consumption, except for specified exemptions.
January 1, 2010	HCFC-142b, HCFC-22	Production and consumption frozen at baseline levels, ban on the production and consumption of virgin chemical unless used as feedstock or refrigerant in appliances manufactured prior to January 1, 2010.

Class II Substances

<u>Date</u>	<u>Affected Compounds</u>	<u>Restriction</u>
January 1, 2015	All other HCFC's	Production and consumption frozen at baseline levels, ban on the production and consumption of virgin chemical unless used as feedstock or refrigerant in appliances manufactured prior to January 1, 2020.
January 1, 2020	HCFC-142b, HCFC-22	Ban on production and consumption, except for specified exemptions.
January 1, 2030	All other HCFCs	Ban on production and consumption, except for specified exemptions.

Because of the sequential dates for phase-out of various HCFCs, it is critical that the planning and analysis of changes to incorporate the use of HCFCs reflect the availability and planned phase-out of the targeted HCFC and the impact of phase-out plans on the life-cycle cost of the substitution. Systems requiring a long service/operational life may have to look to other materials than HCFCs scheduled for early phase-out.

Please contact Mr. Paul Goozh, of my office, at 202-358-1414 or Ms. Marceia Clark-Ingram at MSFC/NOET at 205-544-6229, if you need additional information or help.



Olga M. Dominguez

cc:  
W/Mr. Sipsock

Distribution:

AE/Dr. Mulville  
C/Mr. Christensen  
CO/Mr. King  
J/Ms. Cooper  
JX/Mr. Brubaker  
M/Mr. Trafton  
M-4/Mr. Allen  
M-7/Mr. Oswald  
M-`/Mr. Wisniewski  
Q/Mr. Gregory  
R/Dr. Whitehead  
R/Mr. Reeves  
S/Dr. Huntress  
S/Mr. Huckins  
U/Dr. Nicogossian  
Y/Mr. Townsend  
Y/Mr. Mann  
ARC/D/Dr. McDonald  
ARC/DQH/Ms. Olliges  
ARC/J/Mr. Coleman  
DFRC/X/Mr. Szalai  
DFRC/F/Mr. Brow  
DFRC/S/Mr. Ambrose  
GSFC/100/Mr. Rothenberg  
GSFC/200/Ms. Foster  
GSFC/205.0/Mr. Kaese  
JPL/100/Mr. Stone  
JPL/600/Mr. Grant  
JPL/6020/Mr. Buril  
JSC/AA/Mr. Abbey  
JSC/JA/Mr. Hickmon  
JSC/JJ12/Mr. Hickens  
KSC/CD/Mr. Honeycutt  
KSC/DE-EMO/Dr. Wright  
KSC/TM/Mr. Jones  
LaRC/A/Mr. Holloway  
LaRC/AFC/Mr. Lee  
LaRC/G/Dr. Hessenius  
LeRC/0100/Mr. Campbell  
LeRC/0540/Mr. McCallum  
LeRC/7000/Mr. Yusaka  
MAF/SA39/Mr. Demarest  
MAF/SA39/Mr. Celino

Distribution: (cont'd)

MSFC/DA01/Dr. Littles

MSFC/AB01/Mr. McCullar

MSFC/AE01/Dr. McCaleb

MSFC/DA01/Mr. Schwinghamer

MSFC/EH42/Ms. Darby

MSFC/EH42/Ms. Clark-Ingram

SSC/AA00/Mr. Estess

SSC/GA00/Ms. Kailiwai-Barnett

SSC/GA00/Mr. Magee

WFF/205.3/Mr. Potterton

WSTF/RA/Mr. McCright

WSTF/RA/Mr. Amidei